

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) An electro-optical device comprising:
 - a first substrate;
 - a second substrate opposite the first substrate;
 - a first driving electrode formed of a transparent conductive film on the first substrate;
 - a second driving electrode formed of a transparent conductive film on the second substrate; and
 - an electro-optical material layer including an electro-optical material sealed in a space demarcated by a sealing material between the first substrate and the second substrate,
 - wherein a light reflecting film, a color filter layer, an organic insulating film covering the color filter layer and protecting the color filter layer, and an inorganic insulating film covering substantially an entire surface of the first substrate, are sequentially formed between the first substrate and the first driving electrode, and
 - wherein a mounting terminal formed in a protruding region protruding from the second-first substrate, a first inter-substrate conducting terminal formed in a region overlapping the second substrate, and a wiring pattern for connecting the mounting terminal to the first inter-substrate conducting terminal are disposed on the first substrate,
 - wherein a second inter-substrate conducting terminal electrically connected to the first inter-substrate conducting terminal is disposed in a position opposite the first

inter-substrate conducting terminal of the second substrate, with the sealing material therebetween,

wherein at least a partial region of the wiring pattern includes a metal film formed of the same metal material as the light reflecting film and having a side rising in a substantially vertical direction, and has a structure wherein the metal film, the inorganic insulating film, and a conductive film formed of a transparent conductive film formed of the same material as the first inter-substrate conducting terminal are sequentially disposed on the first substrate, and

wherein the side of the metal film is exposed from the inorganic insulating film, the conductive film extends from the corresponding region and contacts a corresponding side, and the first inter-substrate conducting terminal and the mounting terminal are electrically connected to the metal film through the conductive film making contact with the corresponding side and are electrically connected to each other through the metal film.

2. (Original) The electro-optical device according to Claim 1, further comprising:

an image display region, formed of a plurality of pixels, disposed to correspond to a region in which the first driving electrode and the second driving electrode overlap each other,

wherein part of the wiring pattern near the image display region is coated with the organic insulating film layer, and the mounting terminal and the first inter-substrate conducting terminal are exposed to the outside of the organic insulating film.

3. (Original) The electro-optical device according to Claim 1,

wherein, if the thickness of the metal film is a and the thickness of the inorganic insulating film is b, then $a/b > 5$.

4. (Original) The electro-optical device according to Claim 1,
wherein the thickness a of the metal film satisfies $a > 100$ nm, and the thickness b of the inorganic insulating film satisfies $b < 20$ nm.
5. (Original) The electro-optical device according to Claim 1,
wherein the wiring pattern has two or more portions in which the metal film and the conductive film are electrically connected to each other through the side of the metal film exposed from the inorganic insulating film.
6. (Original) The electro-optical device according to Claim 1,
wherein the portion of the metal film electrically connected to the conductive film through the side of the metal film has a comb shape.
7. (Original) The electro-optical device according to Claim 1,
wherein the wiring pattern includes a conductive base adhering layer formed under the metal film, and
wherein the portion of the metal film electrically connected to the conductive film through the side of the metal film is formed in an isolated island-shaped pattern.
8. (Original) The electro-optical device according to Claim 1,
wherein conductive particles for electrically connecting the first inter-substrate conducting terminal to the second inter-substrate conducting terminal are dispersed in the sealing material.

9. (Currently Amended) An electro-optical device comprising:

a first substrate;

a second substrate opposite the first substrate;

a first driving electrode formed of a transparent conductive film on the first substrate;

a second driving electrode formed of a transparent conductive film on the second substrate;

an electro-optical material layer including an electro-optical material sealed in a space demarcated by a sealing material between the first substrate and the second substrate,

wherein a light reflecting film, a color filter layer, an organic insulating film covering the color filter layer and protecting the color filter layer, and an inorganic insulating film covering substantially the entire surface of the first substrate are sequentially formed between the first substrate and the first driving electrode,

wherein a mounting terminal formed in a protruding region protruding from the second-first substrate and a wiring pattern for connecting the mounting terminal to the first driving electrode are disposed on the first substrate, and

wherein at least a partial region of the wiring pattern includes a metal film formed of the same metal material as the light reflecting film and having a side rising in a substantially vertical direction, and has a structure wherein the metal film, the inorganic insulating film, and a conductive film formed of a transparent conductive film formed of the same material as the first driving electrode are sequentially disposed on the first substrate, and

wherein the side of the metal film is exposed from the inorganic insulating film, the conductive film extends from the corresponding region and contacts a corresponding side, and the first driving electrode and the mounting terminal are

electrically connected to the metal film through the conductive film making contact with the corresponding side and are electrically connected to each other through the metal film.

10. (Original) The electro-optical device according to Claim 9, further comprising:

an image display region, formed of a plurality of pixels, disposed to correspond to a region in which the first driving electrode and the second driving electrode overlap each other, and

wherein part of the wiring pattern near the image display region is coated with the organic insulating film layer, and the mounting terminal is exposed to the outside of the organic insulating film.

11. (Original) The electro-optical device according to Claim 9, wherein, if the thickness of the metal film is a and the thickness of the inorganic insulating film is b, then $a/b > 5$.

12. (Original) The electro-optical device according to Claim 9, wherein the thickness a of the metal film satisfies $a > 100$ nm, and the thickness b of the inorganic insulating film satisfies $b < 20$ nm.

13. (Original) The electro-optical device according to Claim 9, wherein the wiring pattern has two or more portions in which the metal film and the conductive film are electrically connected to each other through the side of the metal film exposed from the inorganic insulating film.

14. (Original) The electro-optical device according to Claim 9,
wherein the portion of the metal film electrically connected to the conductive film
through the side of the metal film has a comb shape.

15. (Original) The electro-optical device according to Claim 9,
wherein the wiring pattern includes a conductive base adhering layer formed
under the metal film, and
wherein the portion of the metal film electrically connected to the conductive film
through the side of the metal film is formed in an isolated island-shaped pattern.

16. (Original) The electro-optical device according to Claim 9,
wherein conductive particles for electrically connecting the first inter-substrate
conducting terminal to the second inter-substrate conducting terminal are dispersed in
the sealing material.

17. (Previously Presented) An electro-optical device comprising:
a pair of opposed substrates;
an electro-optical material interposed between the pair of opposed substrates;
a metal film formed of a metal material having a vertical side rising in a
substantially vertical direction away from one of the opposed substrates;
an insulating film having a first portion covering the metal film and a second
portion disposed adjacent to the vertical side of the metal film, the second portion of the
insulating film being thinner than the metal film so that the vertical side of the metal film
is exposed through the insulating film; and
a wiring line disposed on the insulating film and electrically connected to the
vertical side of the metal film that is exposed through the insulating film.

18. (Original) The electro-optical device according to Claim 1,
wherein the metal material includes at least one of silver alloy, aluminum alloy,
and aluminum.

19. (Original) The electro-optical device according to Claim 9,
wherein the metal material includes at least one of silver alloy, aluminum alloy,
and aluminum.

20. (Original) The electro-optical device according to Claim 17,
wherein the metal material includes at least one of silver alloy, aluminum alloy,
and aluminum.

21. (Original) The electro-optical device according to Claim 1,
wherein the metal material has a two-layer structure of an upper layer formed of
aluminum alloy or aluminum and a lower layer formed of a molybdenum film or a
molybdenum alloy film.

22. (Original) The electro-optical device according to Claim 9,
wherein the metal material has a two-layer structure of an upper layer formed of
aluminum alloy or aluminum and a lower layer formed of a molybdenum film or a
molybdenum alloy film.

23. (Original) The electro-optical device according to Claim 17,

wherein the metal material has a two-layer structure of an upper layer formed of aluminum alloy or aluminum and a lower layer formed of a molybdenum film or a molybdenum alloy film.

24. (Previously Presented) An electrical wiring structure, comprising:

a substrate; and

a wiring pattern including a first region and a second region, the first region of the wiring pattern including a structure in which an insulating film is formed on the substrate and a conductive film formed of a transparent conductive film is formed on the insulating film, and the second region including a structure in which a metal film formed of a metal material is formed on the substrate, the insulating film is formed on the metal film, and the conductive film is formed on the insulating film,

wherein the metal film has a vertical side rising in a substantially vertical direction away from the substrate at a boundary between the first region and the second region,

the insulating film in the first region is formed to have a thickness that is less than a thickness of the metal film in the second region; and

the vertical side of the metal film is exposed from the insulating film formed in the first region and the second region such that the conductive film extends from the first region and contacts the vertical side at the boundary between the first region and the second region, and the metal film formed in the second region is electrically connected through the conductive film making contact with the vertical side.